

REVISED VERSION

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
31 December 2003 (31.12.2003)

PCT

(10) International Publication Number
WO 2004/001982 A1

(51) International Patent Classification⁷: **H03M 13/27**

(21) International Application Number:
PCT/FI2003/000499

(22) International Filing Date: 18 June 2003 (18.06.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
20021222 20 June 2002 (20.06.2002) FI

(71) Applicant (for all designated States except US): **NOKIA CORPORATION** [FI/FI]; Keilalahdentie 4, FIN-02150 Espoo (FI).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **SEBIRE, Benoist** [FR/FI]; Sateentie 6 B 115, FIN-02100 Espoo (FI).

(74) Agent: **KUISMA, Sirpa, Tuulikki**; Page White & Farrer, Runeberginkatu 5, 10th Floor, FIN-00100 Helsinki (FI).

(81) Designated States (*national*): AE, AG, AL, AM, AT (utility model), AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ (utility model), CZ, DE (utility model), DE, DK (utility model), DK, DM, DZ, EC, EE (utility model), EE, ES, FI (utility model), FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK (utility model), SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

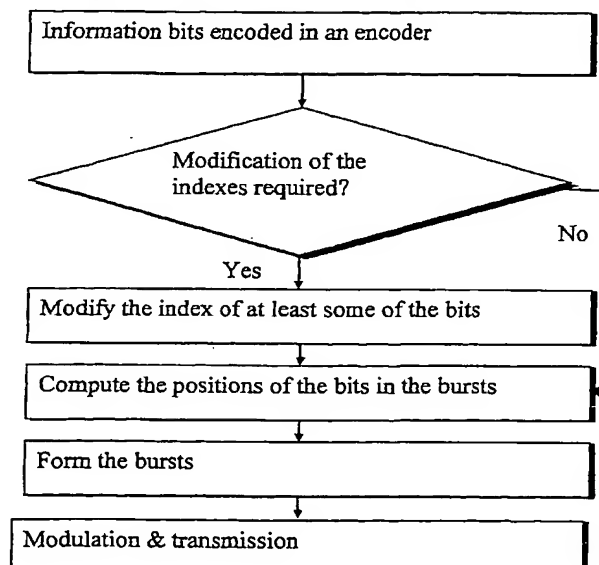
(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

[Continued on next page]

(54) Title: **INTERLEAVING OF INFORMATION BITS**



(57) Abstract: The present invention relates to a method in a transmitter for interleaving information bits from a data block into transmission bursts. Each of the information bits is assigned with an index. The interleaving comprises computing positions of the information bits in the transmission bursts such that the values of the indexes of at least a portion of the information bits are modified. At a receiver it is determined if the value of any of the indexes has been modified before transmission of the transmission bursts. Based on the determination, de-interleaving of the information bits is then accomplished based on modified values of the indexes or originally assigned values of the indexes.



— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) **Date of publication of the revised international search report:**
25 November 2004

(15) Information about Correction:

see PCT Gazette No. 48/2004 of 25 November 2004, Section II

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.